Date: Fri, 18 Feb 94 10:29:17 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V94 #175

To: Info-Hams

Info-Hams Digest Fri, 18 Feb 94 Volume 94 : Issue 175

Today's Topics:

Dentron parts
Frequency doubler design, help, VFO.
Jeff Gold

Keyboards at testing sessions (2 msgs)

Medium range point-to-point digital links (2 msgs)

Nude amateur radio clubs (2 msgs)

PSE HELP regarding my CBA '94

Where is ktwin400.zip

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 18 Feb 94 15:26:52 GMT From: news-mail-gateway@ucsd.edu

Subject: Dentron parts To: info-hams@ucsd.edu

Can anyone help with a source for electrolytic capacitor in the high voltage doubler circuit of a Dentron Clipperton amp? I have checked with local parts suppliers and ham surplus sources, but with no success. The cap is a Nichicon with the following ratings: 125 Mfd at 500WV (ear negative). Because of the board layout, I would prefer an original type; BUT any sources would be much appreciated. Thanks.

Bob, WB5FBS
bobpriez@selu.edu
wb5fbs@n5uxt.#nola.la

Date: 18 Feb 1994 10:24:21 GMT

From: swrinde!cs.utexas.edu!math.ohio-state.edu!jussieu.fr!univ-lyon1.fr!

elendir@network.ucsd.edu

Subject: Frequency doubler design, help, VFO.

To: info-hams@ucsd.edu

Alan Bloom (alanb@sr.hp.com) wrote:

: asirene@ntuvax.ntu.ac.sg (asirene@ntuvax.ntu.ac.sg) wrote:

: I'm not familiar with either the VFO or doubler design, but how about

: this idea: Build another VFO, but with all the frequency-determining

: coils and capacitors 1/2 the value. You would end up with a VFO that

: tunes 14-14.6, assuming the 40 meter version tunes 7-7.3. You could

: reduce the tuning capacitor size even further (i.e. make it about 1/4

: the size instead of 1/2) to reduce the tuning range.

That is a solution, but does not take into account how the transistor acts versus the frequency.

The idea behind a frequency multiplier is the same as a class C amplifier. I mean, you take the output from the VCO, and feed it into a small-signal class C (typically a transistor with emm. grounded, or better a FET, because FET are known to show only quadratic behaviour), whose output is connected to a parallel LC network (or ceramic filter, or whatever) tuned at the second harmonic. That should give you a neat output.

73 from France, Vince (11.5 weeks and waiting)

Date: 18 Feb 1994 16:44:32 GMT

From: agate!howland.reston.ans.net!wupost!bigfoot.wustl.edu!cec3!

jlw3@network.ucsd.edu
Subject: Jeff Gold
To: info-hams@ucsd.edu

Cecil Moore (kg7bk@indirect.com) wrote:

: "Well I will say it flat out:" Jeff Gold "is a liar. I caught him at it

: first hand and won't" read any more of his magazine articles. Everything

: in quotes is from Jeff's posting to the subject of John Ramsey.

what exactly is that "Jeff Gold" in there for?

: In the first paragraph of his recent magazine article he tells us that

: there is something "magical" about ham radio. That's a lie, Jeff. It is

: all simple physics.

The physics of ham radio are purely physics. But how about the allure and people's sustained interest? Seems pretty magical to me.

: He also says that every one of the radios he built has given him pleasure.

: Then in his Internet posting he talks about getting mad, experiencing

: difficulties, and problems with the FTR-146. One of those statements is a

: lie.

Help me out here. what's wrong with this? Everybody eventually feels pleasure if he/she can eventually get a project to work. Now this is the key. If I bought a (older) Ramsey kit--I'd probably be frustrated as hell not being to assemble it. I'm a natural science (note not engineering) major and probably wouldn't have a clue how to get things to work if they weren't spelled out. I'd probably call to complain--and I don't want to know how that'd turn out. (OK so I lied here--I'm taking electric/electronic network courses here [partially for this interest] and MIGHT be able to get a professor to help out--or maybe a fellow ham here) But buy something given a certain set of expectations (said or implied by the seller), you will get mad, frustrated, and experience difficulties and problems if the expectations aren't met.

: Don't anybody bother responding to this ridiculous posting... just wanted : Jeff to see what it's like to be treated the way he treats others.

Well, at least you didn't use the anon server.

: The Magical Devil made me do it. Cecil, kg7bk@indirect.com

At the moment, I wouldn't buy any of Ramsey's kits--I do believe that half of business is selling yourself. And from what I've seen posted on this group, he doesn't sell himself very well. Until netwisdom speaks better of Ramsey, I'll be wary.

just imvho. . .and my choice

-jesse

<no flame intended, but a flare of irritation with the post>

Date: 17 Feb 1994 19:01:44 GMT

From: library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!howland.reston.ans.net!

wupost!crcnis1.unl.edu!unlinfo.unl.edu!mcduffie@network.ucsd.edu

Subject: Keyboards at testing sessions

To: info-hams@ucsd.edu

rcrw90@email.mot.com (Mike Waters) writes:

>The easiest way would be to disable (remove?) the hard drive and run with >only the operasting system and typing software. (Obviously *not* a morse >reader of any type :-) You have to be able to demonstrate that the hard >drive is empty or disabled though.

Okay, what am I missing? What has the hard drive got to do with it? Why would you care about a hard drive? Does Seagate put out HDs that can copy code now? And as for a "morse reader", how would it be able to copy in a testing environment? This guy is sweating a test. He doesn't have time to load some program to help him cheat, if there was such a program. Just watch him like you would all the other testees, maybe a little closer, if you like. I think you will find that you ae being paranoid for no reason.

>BTW if the VEs will allow it, sit for the next higher speed test as well, >after listening to 20wpm for five minutes it is amazing how slow 13 wpm >will sound!

Absolutely!

My 2 cents...

Gary

Date: 18 Feb 94 16:14:55 GMT From: news-mail-gateway@ucsd.edu

Subject: Keyboards at testing sessions

To: info-hams@ucsd.edu

>Or bring in your Royal or Smith Corona portable typewriter. Even the FCC >allowed you to copy by mill back in the 1960s. >Gary Coffman KE4ZV

could be a problem at some test sites. ours this weekend doesn't have anything but deskchairs for seating. he'd have to bring his own table if he needed something that would support the typewriter's weight).

since we went to IR headphones a while back using a noisy old clunker like an SCM or Royal (and I had a Litton/Royal 440 a while back .. and still have a portable Olympia i used in college..) isn't the problem it could be if we were still boom box based.

(there are people coming from St. Cloud to Melbourne this weekend to take a

radio test when the Orlando Hamfest is on this weekend...seems backwards, but they can do what they want...)

bill wb9ivr

Date: Thu, 17 Feb 1994 20:23:13 GMT

From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!math.ohio-state.edu!

sdd.hp.com!col.hp.com!srgenprp!glenne@network.ucsd.edu
Subject: Medium range point-to-point digital links

To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: M/Acom 10mw gunnplexer transceivers are available for on the order of

: \$350 from SI, or raw gunnplexers can be found for \$30-\$70 on the surplus

: market. But you have to design an AFC system, and the high speed digital

: modulator/demodulators for them. Find dishes for them, and find line of

: sight paths for the links. Costs could be similar, around \$1000 per

: link, but site selection would be much more restricted, and likely

: range as well (only a couple of miles for reasonable sized dishes

: and average terrain). Ten watts and 4 foot dishes can give 50+ mile

: paths at video bandwidths under good conditions, but that's serious money.

: It could be worth it for the higher throughput in some cases.

The 2 Mbps link I built and showed in HR Magazine and which is now in the ARRL Handbook had at least 10 dB of excess signal(for BER small compared to 1 error per 1500 byte packet) across 13 miles with 10 milliwatt sources and 2' dishes. The hardware (excluding a digital controller to handle the bit stream) cost little more than \$100 per end.

Ten watts and a 4' dish can do a *lot* more than 50 miles under good conditions, if by good you mean line-of-sight. In fact you wouldn't likely be able to use that much C/N on a terrestrial link.

A 4' antenna with typical feed efficiency is about 40 dBi at 10,250 MHz. Ten watts is +40 dBm; the combination gives +80 dBm ERP. If you consider a video system with 6 MHz of bandwidth and that 45 dB of C/N ratio gives "good quality" video, with a 3 dB sytem noise figure the noise floor is about -103 dBm and you therefore want -58 dBm at the receiver. The receive antenna gives another 40 dBi and you only need -98 dBm (into an isotropic antenna) at the receiving site. So, you are allowed +80-(-98)=178 dB of path loss. At 10.25 GHz this is over 1000 miles; a longer line-of-sight path than you'd be able to actually find anywhere on the surface of the earth.

In fact, with 4' antennas instead of 2' ones (+12 dB system improvement)

and a "real" receiver instead of a 15 dB NF diode mixer (another +12 dB), the 10 milliwatt sources should be capable of 35 miles with the above video system requirements.

While it's true that you would need line-of-sight, I think most practical installations of a lower frequency system also incur 15-40 dB incremental path loss once they leave LOS conditions and for higher information rate transmission effectively need LOS in order to stay economic.

If you don't believe this, carefully measure signal strength change on 440 MHz or 1290 MHz when the two ends of a link go from full visual (no trees etc) line-of-sight to "almost LOS, suburban trees, clutter etc. I'm not talking about a "still sounds full quieting on the HT here, OM" measurement where there is 60 dB of excess signal in a nbfm bandwidth and you can't tell the difference in going to only 30 dB excess, but a real measurement of signal or C/N. I've done this and most situations show at least 20 dB of degradation above 400 MHz.

Although 10 watts may be much cheaper at 440 MHz than it is at 10 GHz, The $2 \times incremental_antenna_gain = 2 \times 20log(10.25/.44) = 55$ dB of the microwave solution far more than compensates for the 30 dB (10 watts to 10 milliwatts) transmit power differential.

Also, at high information rates, the additional multipath and path variability problems incurred by going to a non-LOS path make the UHF solution even less attractive since error correction, channel equalization and additional system margin may be required to guarantee data flow.

Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na
amateur IP: glenn@SantaRosa.ampr.org

Internet: glenne@sr.hp.com

Date: Fri, 18 Feb 1994 17:20:05 GMT

From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!wa4mei.ping.com!

ke4zv!gary@network.ucsd.edu

Subject: Medium range point-to-point digital links

To: info-hams@ucsd.edu

In article <CLDxyq.K47@srgenprp.sr.hp.com> glenne@sad.hp.com (Glenn Elmore)
writes:

>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

>: M/Acom 10mw gunnplexer transceivers are available for on the order of

>: \$350 from SI, or raw gunnplexers can be found for \$30-\$70 on the surplus

>: market. But you have to design an AFC system, and the high speed digital
>: modulator/demodulators for them. Find dishes for them, and find line of
>: sight paths for the links. Costs could be similar, around \$1000 per
>: link, but site selection would be much more restricted, and likely
>: range as well (only a couple of miles for reasonable sized dishes
>: and average terrain). Ten watts and 4 foot dishes can give 50+ mile
>: paths at video bandwidths under good conditions, but that's serious money.
>: It could be worth it for the higher throughput in some cases.

>The 2 Mbps link I built and showed in HR Magazine and which is now in >the ARRL Handbook had at least 10 dB of excess signal(for BER small >compared to 1 error per 1500 byte packet) across 13 miles with 10 milliwatt >sources and 2' dishes. The hardware (excluding a digital controller to >handle the bit stream) cost little more than \$100 per end.

I've looked at your design. It's certainly simple for the performance it promises, but I doubt you could sell it for under \$100 per end with ham market size volumes. The DSY modem kit is not very different in complexity, yet GRAPES can't sell it that cheap. I believe you probably mean that a good scrounger could gather the parts that cheap. If you can offer a kit for \$100 per end, I'll take two right away. I have a one mile through-the-trees link I need to make right now. A pair of Wavelan cards feeding Down East loop yagis won't make it, but 100 mw HTs at 70 cm make it fine, as can a pair of GRAPES 56kb modens feeding 70 cm transverters (but I can't do that because I need them for another link). BTW, a BER better than 1 in 10^6 is no problem with the DSY design with 1.0 microvolt of signal into the modem.

>Ten watts and a 4' dish can do a *lot* more than 50 miles under good >conditions, if by good you mean line-of-sight. In fact you wouldn't likely >be able to use that much C/N on a terrestrial link.

>A 4' antenna with typical feed efficiency is about 40 dBi at 10,250 >MHz. Ten watts is +40 dBm; the combination gives +80 dBm ERP. If you >consider a video system with 6 MHz of bandwidth and that 45 dB of C/N >ratio gives "good quality" video, with a 3 dB sytem noise figure the >noise floor is about -103 dBm and you therefore want -58 dBm at the >receiver. The receive antenna gives another 40 dBi and you only need >-98 dBm (into an isotropic antenna) at the receiving site. So, you are >allowed +80-(-98)=178 dB of path loss. At 10.25 GHz this is over 1000 >miles; a longer line-of-sight path than you'd be able to actually find >anywhere on the surface of the earth.

>In fact, with 4' antennas instead of 2' ones (+12 dB system improvement)
>and a "real" receiver instead of a 15 dB NF diode mixer (another +12 dB), the
>10 milliwatt sources should be capable of 35 miles with the above video
>system requirements.

Well sure, pure line of sight definitely makes things better, witness TVRO systems that make 22,500 miles on 50 watts or less. However, we don't get that kind of performance out of our terrestrial TV links. First of all, the bandwidth required for our TV links isn't 6 MHz, it's 30 MHz, because we use FM video. Of course the FM enhancement effect mitigates that somewhat. And second, we rarely have pure line of sight. Finally, the bulk of the path loss occurs in the first mile, 119.27 db at 13 GHz. After that the incremental losses are rather small, another 3 db for every doubling of distance.

Our experience with setting up ad hoc terrestrial links with our news vans is that the portables with 100 mw and 2 foot dishes shouldn't be counted on beyond 2 miles. A carefully engineered LOS path between two high sites does better, of course. We have one full time path at 24 GHz that is 7 miles. It was solid with 2 foot dishes except when it was raining hard, with 8 foot dishes it's solid even in the heaviest cloudbursts. Our longest engineered path is 50 miles, using a 6 foot dish at one end, and an 8 footer at the other, running 10 watts at 7 GHz, from a 1,000 foot tower to a 2370 foot mountain. Even that path fades in heavy rain.

Note that over a perfectly smooth Earth, LOS is only 38.72 miles for a dish 1,000 feet HAAT. For the typical van mast, or ham tower, of 40 feet, LOS is only 7.745 miles. (Double those numbers for a grazing path to another site of the same HAAT.) When we add in real obstacles like 40-1000 foot buildings, 100 foot trees, etc, it gets much worse. And to avoid the first Fresnel zone, we need to clear an obstacle at the mid-point of the path by 30.96 feet. That's not going to happen even over smooth Earth at a distance greater than 3.87 miles with a 40 foot mast. So pure LOS is pretty much a mountaintop to mountaintop affair for longer distances.

> While it's true that you would need line-of-sight, I think most >practical installations of a lower frequency system also incur >15-40 dB incremental path loss once they leave LOS conditions and >for higher information rate transmission effectively need LOS in order >to stay economic.

Well lets look at a 219 MHz system with a 11 db antenna at 40 feet shooting to another system also with a HAAT of 40 feet and a 11 db antenna. System power is 7 watts. That's 38.45 dbm plus 22 db of antenna gain for a total link ERP of 60.45 dbm. We need 1 uV across 50 ohms for a 1 in 10^6 BER at the receiver. That's 2*10^-14 watts, or -137 dbm. So we have a budget of 60.45-(-137)=197.45 db. Assuming we want to stay out of first Fresnel, we have a total path length of 7.74 miles which has a free space path loss of 101.58 db. That gives us a margin of 95.87 db. Looks like we can easily tolerate 15-40 db of foliage and building loss in the path. For the same path,

it looks like foliage losses at 10 GHz are about 30 db more, for a total of about 198 db at 10 GHz, or about 20 db below your system's noise floor worst case.

>Also, at high information rates, the additional multipath and path >variability problems incurred by going to a non-LOS path make the UHF >solution even less attractive since error correction, channel equalization >and additional system margin may be required to guarantee data flow.

Ok. Lets take a look at beyond horizon signals. If we assume forward scatter for beyond horizon signals, and a 90 mile path, then we're looking at 194.89 db path loss at 219 MHz. At 10 GHz our path loss is now 296.51 db. (It's really silly to be quoting two decimal place precision here, the loss figures are only accurate to about +/- 10%) Anyway, it looks like a modest antenna improvement over the base 11 db shown in earlier figures will give us 1e-6 BER for a DSY modem over this path, but you'd need about 120 db more margin to make it. (Troposcatter loss figures interpolated from the 50% reliability line of fig 35, Chapter 24, _Reference Data for Radio Engineers_ 4th edition, free space path loss from my spreadsheet.)

Now back to the real world. We have a 90 mile 70 cm path between Sweat Mtn and Scaly Mtn that is not line of sight. It works with very few retries. We're using 19 db antennas on each end, and our mean HAAT is about 1300 feet, but with mountains taller than that in between. I won't claim that's typical. We've got another link that's only 21 miles, and line of sight, that doesn't work well. But one end is nestled in downtown buildings and suffers severe multipath (and desense from commercial equipment too). The tighter beamwidth of your system would probably be a win here.

To summarize, if we could depend on having LOS paths, a 10 GHz system would be ideal, but in the real world we probably can't afford the number of hops that would require (except in special terrain cases like the California coast with it's mountains overlooking the population areas), and 219 MHz calculations seem to show it will suffice using troposcatter over the much longer paths we are likely to need in our rolling terrain.

Gary

Gary Coffman KE4ZV |
Destructive Testing Systems |
534 Shannon Way |
Lawrenceville, GA 30244 |

You make it, we break it.
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| gatech!wa4mei!ke4zv!gary | uunet!rsiatl!ke4zv!gary | emory!kd4nc!ke4zv!gary

Date: Thu, 17 Feb 1994 21:27:56 -0800

From: library.ucla.edu!csulb.edu!nic-nac.CSU.net!usc!elroy.jpl.nasa.gov!mcws!

FUsenetToss@network.ucsd.edu Subject: Nude amateur radio clubs

To: info-hams@ucsd.edu

I have been a ham for a long time, and have gone to nudist beaches, colonies, and resorts on occasion. My experience indicates that hams are no uglier than those who take it all off at these places. As a matter of what I have observed, the attendees at "naturist" places are less attractive than the general population (myself excepted of course).

Going to a ham club meeting alone is more pleasant than going to a nudist resort alone; single people are looked at with some suspicion.

73 DE K6DDX

Date: 18 Feb 94 12:38:27 -0800

From: agate!howland.reston.ans.net!cs.utexas.edu!swrinde!sgiblab!wrdis02.robins.af.mil!apollo.robins.af.mil!woodj@network.ucsd.edu

Subject: Nude amateur radio clubs

To: info-hams@ucsd.edu

In article <2juhv0\$h56@charm.magnus.acs.ohio-state.edu>,
wvhorn@magnus.acs.ohio-state.edu (William VanHorne) writes:
> In article <CLC4Dw.10E@oakhill.sps.mot.com>,
> Ben Thornton <ben@yosemite.sps.mot.com> wrote:

>>So, explain to me just how it is that someone is somehow a different person >>simply because they wear no clothing. The difference is only in the eye >>of the beholder...

> Hardly. If you're nude, you can't wear one of those nifty baseball caps > with your name and callsign on it. What's the point of being in ham > radio if you don't wear your baseball cap? Sheesh.

> ---Bill VanHorne

Don't forget about the name tags. I reckon it would be a real boon for the double-sided tape manufacturers.

Jim Wood

Date: 18 Feb 1994 09:06:06 GMT

From: agate!howland.reston.ans.net!math.ohio-state.edu!jussieu.fr!univ-lyon1.fr!

swidir.switch.ch!scsing.switch.ch!news.dfn.de!news.dfn.de!server2.rz.uni-

leipzig.de!news.uni-jena.de!prakinf2.@
Subject: PSE HELP regarding my CBA '94

To: info-hams@ucsd.edu

After the change of callsigns in (East) Germany I don't know whether my callsign is noticed with the correct address or not in the international part of the CallBook and whether my old callsign Y32JK is still included.

If you have a new 1994 CallBook - please be so kind and tell me the address for my calls DL5ATP and Y32JK.

Thank you in advance.

DL5ATP

_ _

Thomas Planke P
Technical University of Ilmenau

Planke@Systemtechnik.TU-Ilmenau.DE

Phone: +49 3677/69-1465

Date: Thu, 17 Feb 1994 19:15:32 GMT

From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!europa.eng.gtefsd.com!

library.ucla.edu!csulb.edu!csus.edu!netcom.com!wy1z@network.ucsd.edu

Subject: Where is ktwin400.zip

To: info-hams@ucsd.edu

The ham radio archives on World had a program called ktwin400.zip.

I have since lost track of who offered it, but when I recently tried to unzip it, zip claimed the files was corrupted. I DID transfer it in binary mode from World directly to the PC.

I tried both DOS's pkunzip v.2.04g, along with UNIX's unzip, but no luck.

If anyone can point me to another location which has this file, I'd be very appreciative. I already checked the hamradio section on Oakland, but no luck.

Thanks much in advance!

P.S. Please note the new FTP address for World in my .signature

Scott

- -

Scott Ehrlich Amateur Radio: wy1z		-	l		
Maintainer of the Boston Amateur Radio Club hamradio FTP area on the World - ftp.std.com pub/hamradio					
Date: Fri, 18 Feb 199	4 04:24:37 GMT				

From: agate!howland.reston.ans.net!wupost!csus.edu!netcom.com!

n1ist@network.ucsd.edu To: info-hams@ucsd.edu

References <9402152045.AA03433@rodgers.rain.com>, <CLAFwp.J8C@cup.hp.com>, <2jrovm\$qss@reznor.larc.nasa.gov>

Subject : Re: Nude QSL cards

In article <CLAFwp.J8C@cup.hp.com> jholly@cup.hp.com (Jim Hollenback) writes: -No, I don't think your out of place. Would one send a nude QSL to a foreign -country? I certainly hope not. What sort of image are you presenting for the -U.S.?

First of all, the discussion concerns QSL cards for special event stations commemorating National Nude Week. Having a naturist scene on the card note, not pornography - doesn't sound too unusual. As for the image, remember that most of the world does not have the hangups about nudity that seems to be common here in the US.

As far as the envelope issue goes, I prefer to get QSLs in envelopes, since they are less likely to get trashed (or stamped/printed on) by the Post Office.

When I work the special event station, I will send a SASE to help with the cost of the envelope and postage.

73. /mike

Michael L. Ardai N1IST \ | / Teradyne ATG Boston /|\ ardai@maven.dnet.teradyne.com n1ist@netcom.com

Date: Fri, 18 Feb 1994 04:07:04 GMT

From: agate!howland.reston.ans.net!wupost!csus.edu!netcom.com!

n1ist@network.ucsd.edu To: info-hams@ucsd.edu

References <1994Feb3.190229.8136@arrl.org>, <x8yqthx.jramsey@delphi.com>, <2jqu8k\$96m@news.acns.nwu.edu>

Subject : Re: RAMSEY FX TRANSCEIVER

In article <2jqu8k\$96m@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan)
writes:

- -In article <x8yqthx.jramsey@delphi.com>, <jramsey@delphi.com> wrote:
- ->ARRL couldn't get their kit to work! So we sent them an assembled unit.
- -I do not know how you read this, but to me it looks like bad news for
- -buildability of Ramsey Kits. And now imagine an average John Q. Ham
- -with a 200 watt soldering gun and acid core solder. :)

Apparantly, Ramsey will be losing the 2 meter kit business very soon. Ten Tec has a 2M kit for \$195 (available in May) that not only includes a 5 watt 2M radio, expandable to 35W on the board and the case, but a *complete* micro-driven front panel with frequency readout, memories, and a tuning knob in 5kc clicks. No more diodes, and only \$20 more than Ramsey (\$150 for the radio and \$25 for the 'optional' case.

Why do I feel that Ten Tec is more likely to make kits that will work, meet FCC spec, and not thump when the squelch closes?

/mike 				
\ /	Michael L. Ardai	N1IST	Teradyne ATG Boston	
/ \	ardai@maven.dnet.teradyne.com		n1ist@netcom.com	
End of	Info-Hams Digest V94	#175		
****	*****	***		